NT3BB-1P

Quick Installation Guide

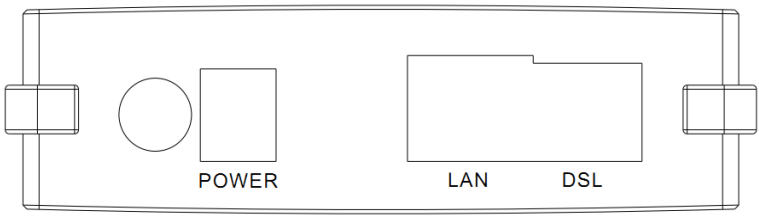
1 Introduction

The NT3BB-1P device is an ADSL access device that supports multiple line modes. It provides one 10/100Base-T Ethernet interface at the user end. The device provides high-speed ADSL broadband connection to the Internet or Intranet for high-end users such as net cafes and office users. The device provides high performance access to the Internet, downlink up to 24 Mbps and uplink up to 1 Mbps.

Note:

The figures in this document are for reference only.

Rear Panel



The following table describes the interfaces of the device:

Items	Description
○	Power switch. Power on or power off the device.
POWER	Power interface, for connecting to the power adapter.
LAN	RJ-45 interface, for connecting to the Ethernet interface of PC or other Ethernet devices through Ethernet cable.
DSL	RJ-11 interface, for connecting to the ADSL interface or a splitter through the telephone cable.
RESET（on the side panel）	Reset to the factory defaults. Keep the device powered on, then insert a paper clip in to the hole, press and hold for over 3 seconds. The configuration is reset to the factory defaults.

2 Connecting the Router

Step 1 Connect the **DSL** interface of the device and the **Modem** interface of the splitter through a telephone cable. Connect the phone to the **Phone** interface of the splitter through a cable. Connect the incoming line to the **Line** interface of the splitter.

The splitter has three interfaces:

- **Line**: Connect to a wall phone jack (RJ-11 jack).
- **Modem**: Connect to the ADSL jack of the device.
- **Phone**: Connect to a telephone set.

Step 2 Connect the **LAN** interface of the device to the network card of the PC through an Ethernet cable (MDI/MDIX).

Note:

Use twisted-pair cables to connect with the hub or switch.

Step 3 Plug one end of the power adapter to the wall outlet and connect the other end to the **POWER** interface of the device.

Figure 1 shows the application diagram for the connection of the router, PC, splitter and the telephone sets, when no telephone set is placed before the splitter.

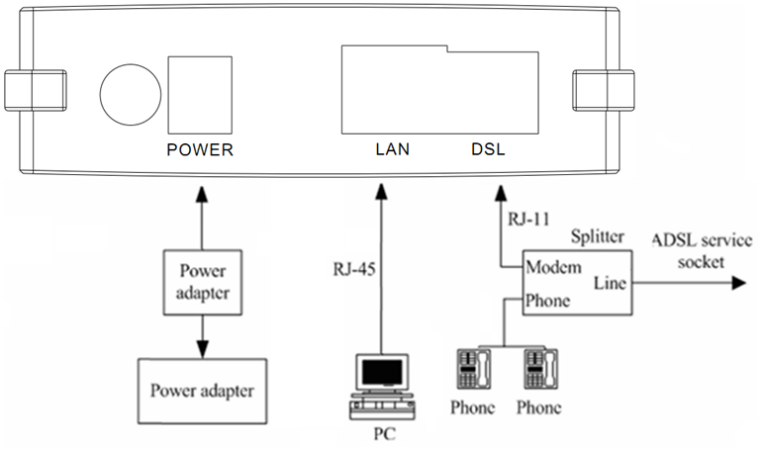


Figure 1 Connection diagram (Without connecting telephone sets before the splitter)

The following table describes the interfaces of the device:

Items	Description
○	Power switch. Power on or power off the device.
POWER	Power interface, for connecting to the power adapter.
LAN	RJ-45 interface, for connecting to the Ethernet interface of PC or other Ethernet devices through Ethernet cable.
DSL	RJ-11 interface, for connecting to the ADSL interface or a splitter through the telephone cable.
RESET（on the side panel）	Reset to the factory defaults. Keep the device powered on, then insert a paper clip in to the hole, press and hold for over 3 seconds. The configuration is reset to the factory defaults.

3 Web Configuration

This chapter describes how to configure the router by using the Web-based configuration utility.

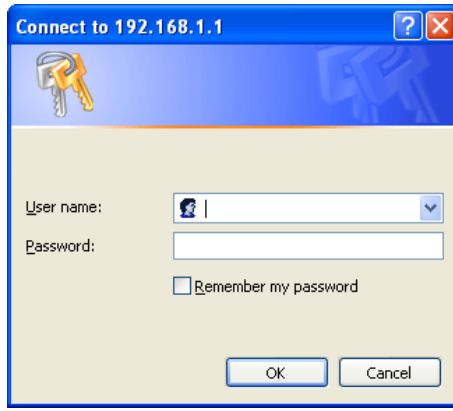
3.1 Access the Router

The following is the detailed description of accessing the router for the first time.

Step 1 Open the Internet Explorer (IE) browser and enter **http://192.168.1.1**.

Step 2 In the **Login** page that is displayed, enter the username and password.

- The username and password of the super user are **admin** and **3bb**.



If you log in, the page shown in the following figure appears. You can check, configure and modify all the settings.

Note:

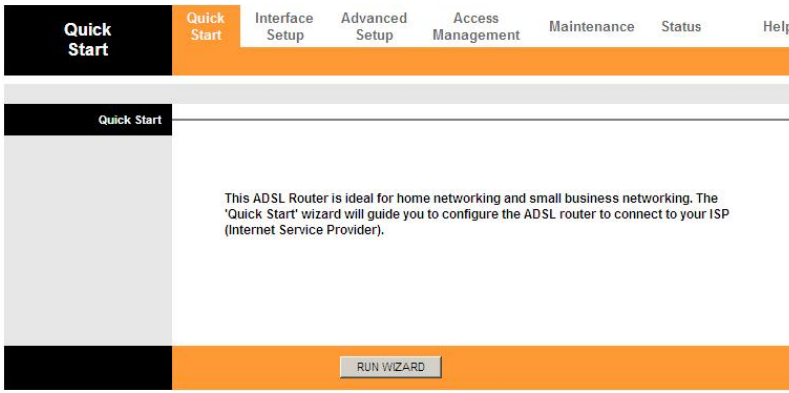
In the Web configuration page, the settings can be saved permanently.

3.2 Quick Start

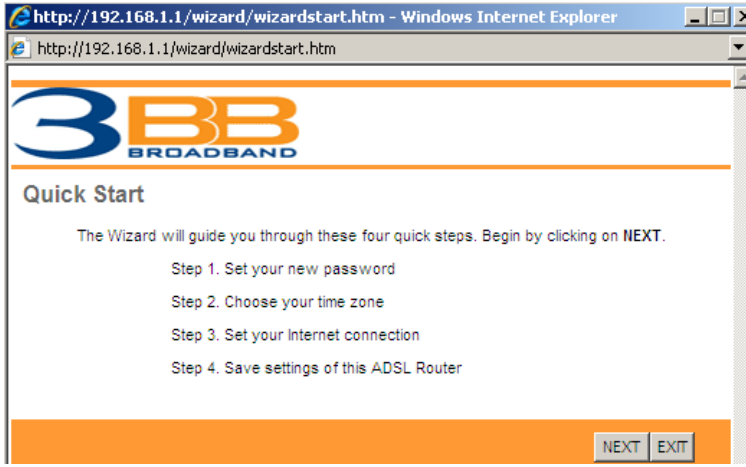
The **Quick Start** page will guide you to configure the ADSL router to connect to your ISP (Internet Service Provider). The following sections describe these various configuration parameters. Whether you configure these parameters or use the default ones, click **NEXT** to enable your Internet connection.

When subscribing to a broadband service, you should be aware of the method by which you are connected to the Internet. Your physical WAN device can be connected to the internet by either PPP, ADSL or both. The technical information about the properties of your Internet connection is provided by your Internet service provider (ISP). For example, your ISP should inform you whether you are connected to the Internet using a static or dynamic IP address, and the protocol that you use to communicate on the Internet.

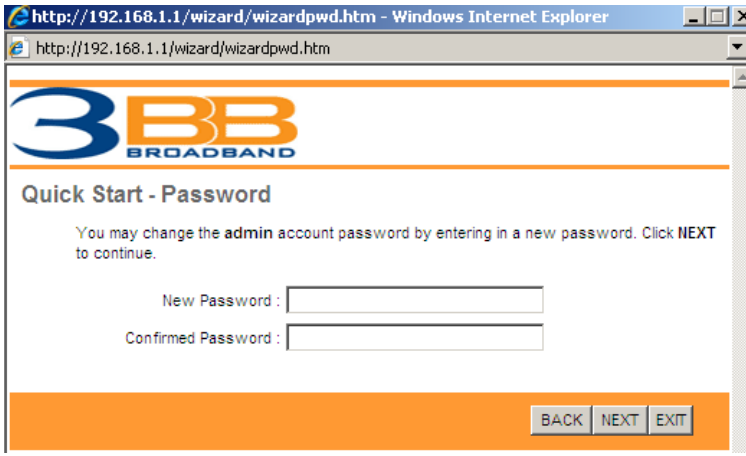
In the navigation bar, click **Quick Start**. The page as shown in the following figure appears.


Quick Start
Quick Start
Interface Setup
Advanced Setup
Access Management
Maintenance
Status
Help
Quick Start
This ADSL Router is ideal for home networking and small business networking. The 'Quick Start' wizard will guide you to configure the ADSL router to connect to your ISP (Internet Service Provider).
RUN WIZARD

Click **RUN WIZARD**, there will pop up a new page as shown in the following figure appears.

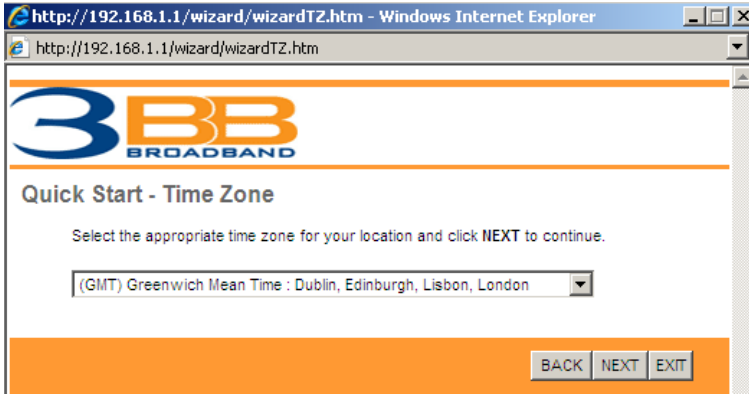

http://192.168.1.1/wizard/wizardstart.htm - Windows Internet Explorer
http://192.168.1.1/wizard/wizardstart.htm
BROADBAND
Quick Start
The Wizard will guide you through these four quick steps. Begin by clicking on NEXT.
Step 1. Set your new password
Step 2. Choose your time zone
Step 3. Set your Internet connection
Step 4. Save settings of this ADSL Router
NEXT
EXIT

Click EXIT, this page will be closed. Click **NEXT**, the page as shown in the following figure appears.



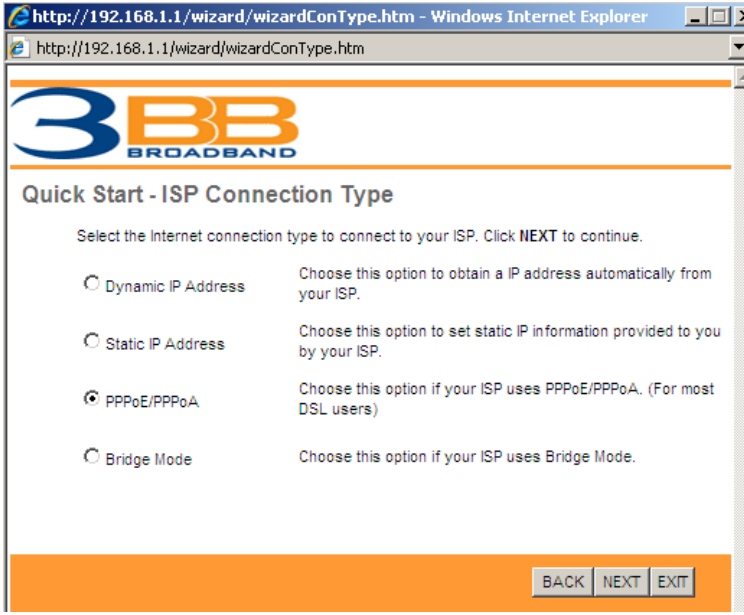
In this page, you can modify the admin account's password, and you can make it blank if you do not want to change it. After finishing all quick start settings, it will be saved and effective immediately.

Click **NEXT**, the page as shown in the following figure appears.


http://192.168.1.1/wizard/wizardTZ.htm - Windows Internet Explorer
http://192.168.1.1/wizard/wizardTZ.htm
BROADBAND
Quick Start - Time Zone
Select the appropriate time zone for your location and click NEXT to continue.
(GMT) Greenwich Mean Time : Dublin, Edinburgh, Lisbon, London
BACK
NEXT
EXIT

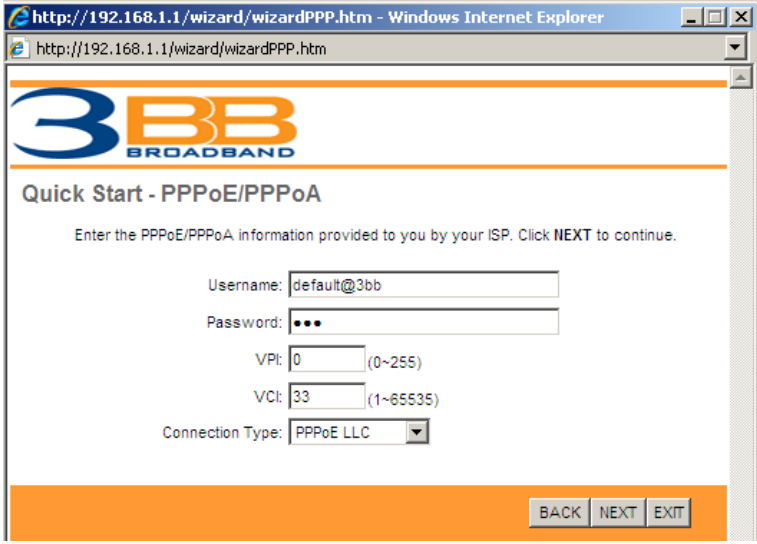
In this page, you can select a local time zone.

Click **NEXT**, the page as shown in the following figure appears.


http://192.168.1.1/wizard/wizardConType.htm - Windows Internet Explorer
http://192.168.1.1/wizard/wizardConType.htm
BROADBAND
Quick Start - ISP Connection Type
Select the Internet connection type to connect to your ISP. Click NEXT to continue.
Dynamic IP Address
Choose this option to obtain a IP address automatically from your ISP.
Static IP Address
Choose this option to set static IP information provided to you by your ISP.
PPPoE/PPPoA
Choose this option if your ISP uses PPPoE/PPPoA. (For most DSL users)
Bridge Mode
Choose this option if your ISP uses Bridge Mode.
BACK
NEXT
EXIT

There are four WAN connection types: **Dynamic IP Address, Static IP Address, PPPoE/PPPoA** and **Bridge Mode**. Select the appropriate WAN connection type which is provided by your ISP.

Take an example, select the PPPoE/PPPoA, and then click **NEXT**, the page as shown in the following figure appears.

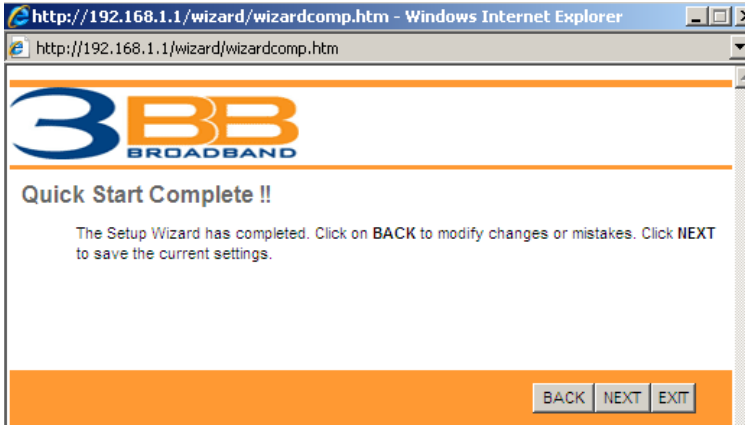


The following table describes the parameters in this page:

Field	Description
PPP Username	Enter the username for PPPoE dial-up, which is provided by your ISP.
PPP Password	Enter the password for PPPoE dial-up, which is provided by your ISP.
VPI	Virtual path identifier (VPI) is the virtual path between two points in an ATM network. Its valid value is in the range of 0 to 255. Enter the correct VPI provided by your ISP. By default, VPI is set to **0**.
VCI	Virtual channel identifier (VCI) is the virtual channel between two points in an ATM network. Its valid value is in the range of 1 to 65535. Enter the correct VCI provided by your ISP. By default, VCI is set to **33**.
Connection Type	You can select PPPoE **LLC**, **PPPoE VC-Mux**,

Field	Description
	PPPoA LLC or **PPPoA VC-Mux**. In this example, the encapsulation mode is set to **PPPoE LLC**.

After setting, click **NEXT**, the page as shown in the following figure appears.


http://192.168.1.1/wizard/wizardcomp.htm - Windows Internet Explorer
http://192.168.1.1/wizard/wizardcomp.htm
BROADBAND
Quick Start Complete !!
The Setup Wizard has completed. Click on BACK to modify changes or mistakes. Click NEXT to save the current settings.
BACK
NEXT
EXIT

Click **BACK** to modify the settings.
Click **NEXT** to save the settings.
Click **EXIT** to cancel the settings.

Note:

After saving the settings in the **Quick Start** page, you can view this WAN connection settings in the **Interface Setup** > **Internet** page.

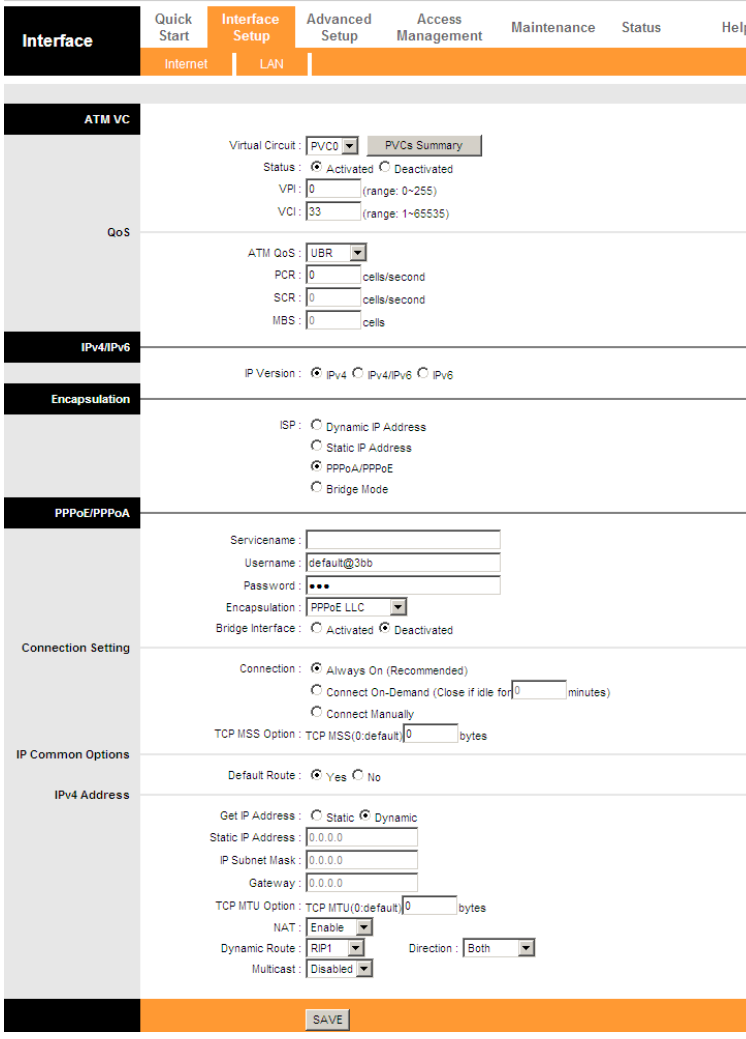
3.3 Interface Setup

In the navigation bar, click **Interface Setup**. The **Interface Setup** page that is displayed contains **Internet** and **LAN**.

3.3.1 Internet

Choose **Interface Setup** > **Internet**. The **Internet** page that is displayed contains **ATM VC, QoS** and **Encapsulation** etc**.**

Click **Internet** pane, the page shown in the following figure appears. In this page, you can configure WAN interface of your router.


Interface
Quick Start
Interface Setup
Advanced Setup
Access Management
Maintenance
Status
Help
Internet
LAN
ATM VC
Virtual Circuit : PVC0
PVCs Summary
Status : Activated Deactivated
VPI : 0 (range: 0~255)
VCI : 33 (range: 1~65535)
QoS
ATM QoS : UBR
PCR : 0 cells/second
SCR : 0 cells/second
MBS : 0 cells
IPv4/IPv6
IP Version : IPv4 IPv4/IPv6 IPv6
Encapsulation
ISP : Dynamic IP Address
Static IP Address
PPPoA/PPPoE
Bridge Mode
PPPoE/PPPoA
Servicename :
Username : default@3bb
Password : •••
Encapsulation : PPPoE LLC
Bridge Interface : Activated Deactivated
Connection Setting
Connection : Always On (Recommended)
Connect On-Demand (Close if idle for 0 minutes)
Connect Manually
IP Common Options
TCP MSS Option : TCP MSS(0:default) 0 bytes
IPv4 Address
Default Route : Yes No
Get IP Address : Static Dynamic
Static IP Address : 0.0.0.0
IP Subnet Mask : 0.0.0.0
Gateway : 0.0.0.0
TCP MTU Option : TCP MTU(0:default) 0 bytes
NAT : Enable
Dynamic Route : RIP1
Direction : Both
Multicast : Disabled
SAVE

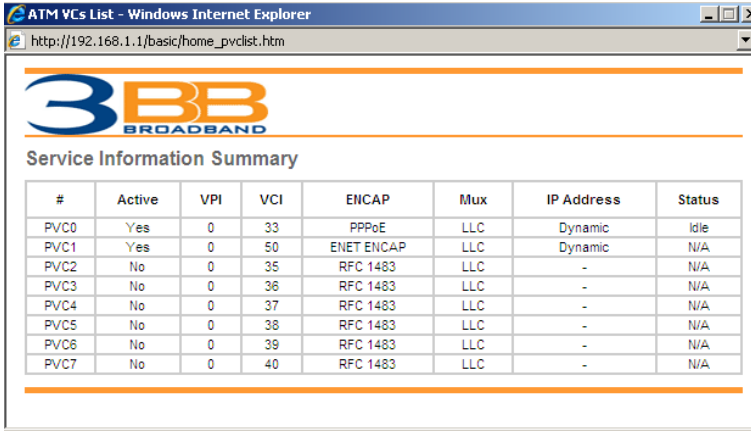
The following table describes the parameters of this page:

Field	Description
Virtual Circuit	You can select a virtual circuit from the drop-list. Click PVCs Summary to view the eight PVCs (from PVC0 to PVC7). Only PVC0 is activated by default.
Status	You can select **Activated** or **Deactivated** for the selected virtual circuit.
VPI	The virtual path between two points in an ATM network, ranging from 0 to 255.
VCI	The virtual channel between two points in an ATM network, ranging from 1 to 65535.
ATM QoS	The QoS category of the PVC. You can choose **UBR**, **CBR**, **nrt-VBR** or **rt-VBR**.
PCR	Peak cell rate (PCR) is the maximum rate at which cells can be transmitted along a connection in the ATM network. Its value ranges from 1 to 65535.
SCR	Sustain cell rate (SCR) is the maximum rate that traffic can pass over a PVC without the risk of cell loss. Its value ranges from 0 to 65535.
MBS	Maximum burst size (MBS) is the maximum number of cells that can be transmitted at the PCR. Its value ranges from 0 to 65535.
IP Version	The IP Protocol you adopted. You can choose **IPv4/IPv6**, **IPv4** or **IPv6**.
ISP	Select the connection mode provided by your ISP. There are four options available: **Dynamic IP Address**, **Static IP Address**, **PPPoA/PPPoE** or **Bridge Mode**.
Servicename	You can set the service name.
Username	Enter the username for PPPoE dial-up, which is provided by your ISP.

Field	Description
Password	Enter the password for PPPoE dial-up, which is provided by your ISP.
Encapsulation	You can choose **PPPoE LLC**, **PPPoE VC-Mux**, **PPPoA LLC** or **PPPoA VC-Mux**.
Bridge Interface	You can choose **Activated** or **Deactivated**.
Connection	To control the time of connecting to the internet. You can choose **Always On (Recommended)**, **Connect On-Demand (Close if idle for xx minutes)**, or **Connect Manually**
TCP MSS Option	You can keep the default value **0** or set a tcp mss value. The range is from 100 to 1452.
Default Route	Choose the current PVC as the default pvc, and it works in the routing mode. You can enable or disable default route.
Get IP Address	You can choose **Static**, or **Dynamic**.
Static IP Address	When **Static** is selected, you can enter the IP address for dial-up, which is provided by your ISP
IP Subnet Mask	When **Static** is selected, you can enter the IP subnet mask for dial-up, which is provided by your ISP
Gateway	When **Static** is selected, you can enter the gate way IP for dial-up, which is provided by your ISP
NAT	Select it to enable Network Address Translation (NAT) function. If you do not select it and you want to access the Internet normally, you must add a route on the uplink equipment. Otherwise, the access to the Internet fails. Normally, it is enabled.
TCP MTU Option	You can keep the default value **0** or set a **TCP MTU** value. The range is from 100 to 1500.

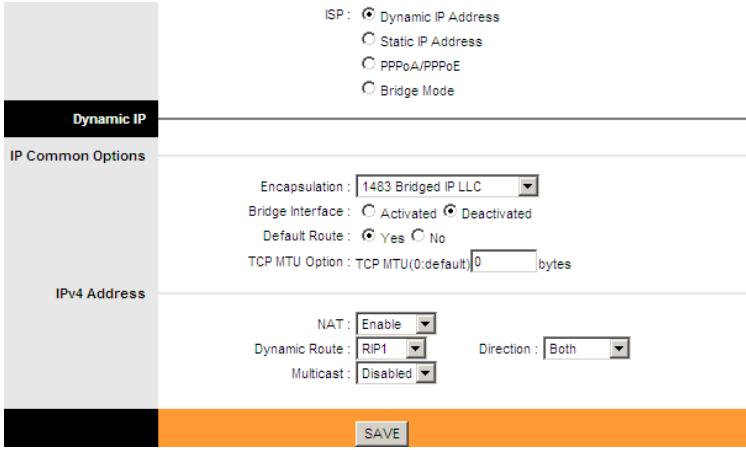
Field	Description
Dynamic Route	You can select **RIP1**, **RIP2-B**, **RIP2-M**
Direction	You can select **None**, **Both**, **IN Only**, **OUT Only**
Multicast	You can choose **Disabled** Internet Group Management Protocol (IGMP) function, or choose enable **IGMP v1**, or **IGMP v2**.

Click **PVCs Summary** beside the **field Virtual Circuit**, and the following figure appears. You can view the information of each PVC.



#	Active	VPI	VCI	ENCAP	Mux	IP Address	Status
PVC0	Yes	0	33	PPPoE	LLC	Dynamic	Idle
PVC1	Yes	0	50	ENET ENCAP	LLC	Dynamic	N/A
PVC2	No	0	35	RFC 1483	LLC	-	N/A
PVC3	No	0	36	RFC 1483	LLC	-	N/A
PVC4	No	0	37	RFC 1483	LLC	-	N/A
PVC5	No	0	38	RFC 1483	LLC	-	N/A
PVC6	No	0	39	RFC 1483	LLC	-	N/A
PVC7	No	0	40	RFC 1483	LLC	-	N/A

If you select **Dynamic IP Address** in the **ISP** encapsulation, the page shown in the following figure appears. In this page, you can configure parameters of this PVC.

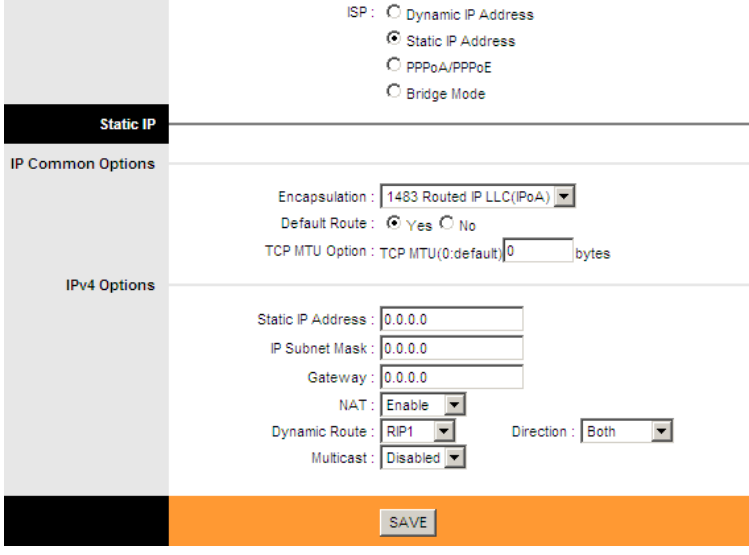


The following table describes the parameters of this page:

Field	Description
Encapsulation	You can choose **1483 Bridged IP LLC**, **1483 Bridged IP VC-Mux**, **1483 Routed IP LLC(IPoA)**, **1483 Routed IP VC-Mux**.
Bridge Interface	You can choose **Activated** or **Deactivated**.
Default Route	You can enable or disable default route.
TCP MTU Option	You can keep the default value **0** or set a tcp mtu value. The range is from 100 to 1500.
NAT	Select it to enable Network Address Translation (NAT) function. If you do not select it and you want to access the Internet normally, you must add a route on the uplink equipment. Otherwise, the access to the Internet fails. Normally, it is enabled.
Dynamic Route	You can select **RIP1**, **RIP2-B**, **RIP2-M**.
Direction	You can select **None**, **Both**, **IN Only**, **OUT Only**
Multicast	You can choose **Disabled** Internet Group Management Protocol (IGMP) function, or

Field	Description
	choose enable **IGMP v1**, or **IGMP v2**.

If you select **Static IP Address** in the **ISP** encapsulation, the page shown in the following figure appears. In this page, you can configure parameters of this PVC.

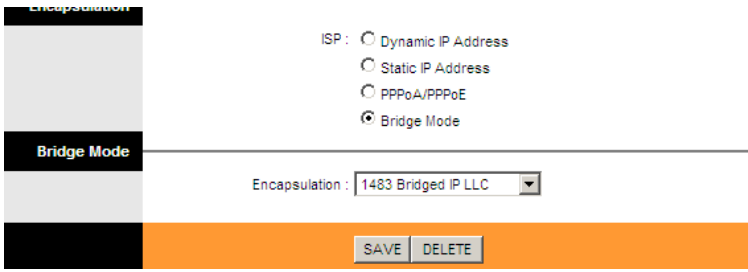


The following table describes the parameters of this page:

Field	Description
Encapsulation	You can choose **1483 Bridged IP LLC**, **1483 Bridged IP VC-Mux**, **1483 Routed IP LLC(IPoA)**, **1483 Routed IP VC-Mux**.
Default Route	You can enable or disable the default route.
TCP MTU Option	You can keep the default value **0** or set a tcp mtu value. The range is from 100 to 1500.
Static IP Address	You can enter the ip address for dial-up, which is provided by your ISP
IP Subnet Mask	You can enter the IP subnet mask for dial-up,

Field	Description
	which is provided by your ISP.
Gateway	You can enter the gate way ip for dial-up, which is provided by your ISP.
NAT	Select it to enable Network Address Translation (NAT) function. If you do not select it and you want to access the Internet normally, you must add a route on the uplink equipment. Otherwise, the access to the Internet fails. Normally, it is enabled.
Dynamic Route	You can select **RIP1**, **RIP2-B**, **RIP2-M**.
Direction	You can select **None**, **Both**, **IN Only**, **OUT Only.**
Multicast	You can choose **Disabled** Internet Group Management Protocol (IGMP) function, or choose enable **IGMP v1** or **IGMP v2**.

If **Bridge Mode** is selected in the **ISP** encapsulation, the page shown in the following figure appears. In this page, you can configure parameters of this PVC.



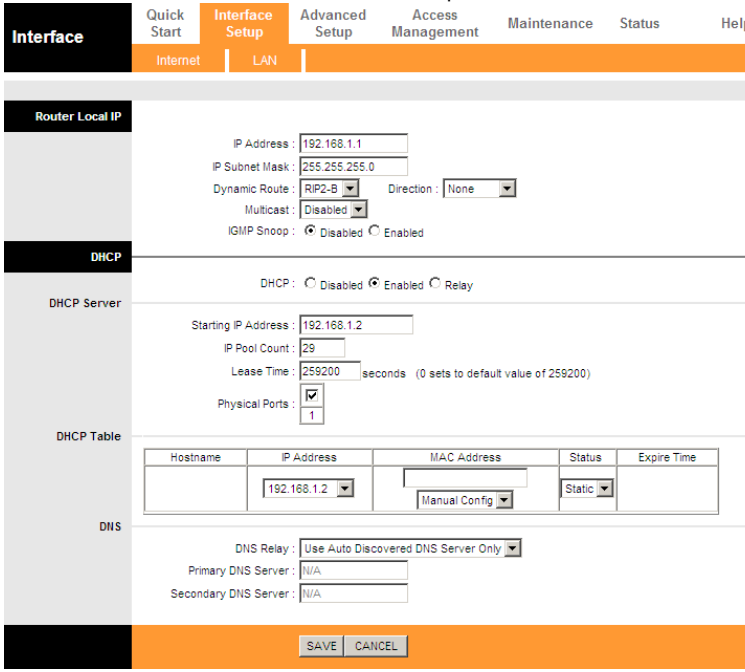
The following table describes the parameters of this page:

Field	Description
ISP	You can choose **Bridge mode** from these options.
Encapsulation	You can choose **1483 Bridged IP LLC** or **1483 Bridged IP VC-Mux**.

After finishing, click **SAVE** to apply the settings of this PVC.

3.3.2 LAN

Choose **Interface Setup** > **LAN**. The **LAN** page that is displayed contains **Router Local IP** and **DHCP**. In this page, you can change IP address of the router. The default IP address is 192.168.1.1, which is the private IP address of the router.



The following table describes the parameters of this page:

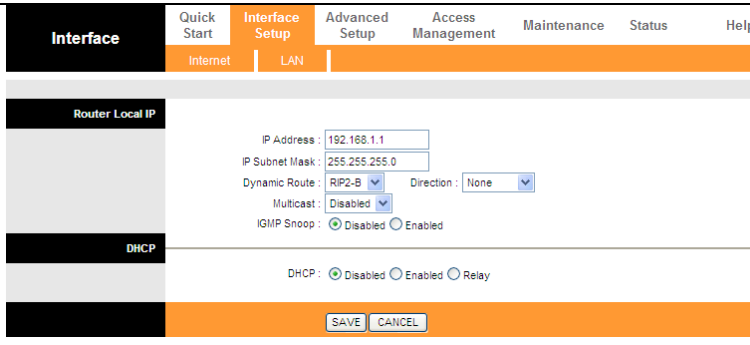
Field	Description
IP Address	Enter the IP address of LAN interface. It is recommended to use an address from a block that is reserved for private use. This address block is 192.168.1.1- 192.168.255.254.

Field	Description
IP Subnet Mask	Enter the subnet mask of LAN interface. The range of subnet mask is from 255.255.0.0-255.255.255.254.
Dynamic Route	You can select **RIP1**, **RIP2-B**, **RIP2-M**
Direction	You can select **None**, **Both**, **IN Only**, **OUT Only**
Multicast	You can choose **Disabled** Internet Group Management Protocol (IGMP) function, or choose enable **IGMP v1** or **IGMP v2**.
IGMP Snooping	Select enable or disable IGMP Snooping.
DHCP	You can choose **Disabled**, **Enabled** or **Relay**. If set to **Enabled**, the router can assign IP addresses, IP default gateway and DNS Servers to the host in Windows95, Windows NT and other operation systems that support the DHCP client.
Starting IP Address	It specifies the first IP address.
IP Pool Count	The router assigns IP address range based on the IP pool counted to the host.
Lease Time	The lease time determines the period that the host retains the assigned IP addresses before the IP addresses change. The default is 259200 seconds.
Physical Ports	If remove the tag' √', LAN PC can't apply for an IP from CPE through the protocol 'DHCP'.
DHCP Table	
Hostname	It displays the host name of the DHCP client.
IP Address	It displays the IP address assigned to the DHCP client from the router.
MAC Address	It displays the MAC address of the DHCP client. Each Ethernet device has a unique MAC address. The MAC address is assigned at the factory consisting of six pairs of hexadecimal characters, for example, 00-A0-C5-00-02-12.
Status	The status of your IP address.
Expire Time	It displays the lease time. The lease time determines the period that the host retains the

Field	Description
	assigned IP addresses before the IP addresses change.
DNS Relay	You can choose **Use Auto Discovered DNS Server Only** or **Use User Discovered DNS Server Only**. If you select **Auto Discovered**, the router accepts the firstly-received DNS assignment from one of the PPPoA, PPPoE or MER enabled PVC(s) during the connection establishment. If select **User Discovered**, enter the IP addresses of the primary and secondary DNS servers.
Primary DNS Server	Enter the IP address of the primary DNS server.
Secondary DNS Server	Enter the IP address of the secondary DNS Server.

Dynamic Host Configuration Protocol (DHCP) allows the individual PC to obtain the TCP/IP configuration from the centralized DHCP server. You can configure this router as a DHCP server or disable it. The DHCP server can assign IP address, IP default gateway, and DNS server to DHCP clients. This router can also act as a surrogate DHCP server (DHCP proxy) where it relays IP address assignment from an actual DHCP server to clients. You can enable or disable DHCP server or DHCP proxy.

In the **DHCP** field, choose **Disabled**, the page shown in the following figure appears.



In the **DHCP** field, choose **Relay**, the page shown in the following figure appears.